



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,925	11/24/2003	Thomas M. Dunn	32409-CNT1	5231
7590	03/21/2005		EXAMINER	NGUYEN, THONG Q
THOMAS B. LUEBBERING HOVEY, WILLIAMS, TIMMONS & COLLINS Suite 400 2405 Grand Kansas City, MO 64108			ART UNIT	PAPER NUMBER
			2872	
			DATE MAILED: 03/21/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/720,925	DUNN, THOMAS M. 
	Examiner Thong Q. Nguyen	Art Unit 2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 21 December 2004.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-17 and 24-29 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-17 and 24-29 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 24 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/24/2003</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Response to Amendment***

1. The present Office action is made in response to the Pre-amendment filed on 12/21/2004. It is noted that in the pre-amendment of 12/21/2004, applicant has canceled claims 18-23 and added a new set of claims, i.e., claims 24-29, into the present application.

A review of the newly-added claims 24-29 has resulted that the device of the new claims has similar scope to that of original claims 1-17. As such, all pending claims 1-17 and 24-29 are examined in this Office action.

### ***Election/Restrictions***

2. The restriction requirement as set forth in the previous Office action mailed to applicant on 11/26/2004 is overcome by the cancellation of the claims 18-23 as stated in the amendment filed by applicant on 12/21/2004.

### ***Drawings***

3. The drawings contain four sheets of figures 1-5 filed on 11/14/2003 have been received by the Office. These drawings are objected by the Examiner for the following reason(s).

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: In particular, the reference "54" shown in figure 3 is not mentioned in the specification. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to

avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
6. The disclosure is objected to because of the following informalities: a) Page 1: line 6, --now U.S. Patent No. 6,714,348—should be added after "November 14, 2001"; b) Page 4: line 28, "course" should be changed to --coarse--. Appropriate correction is required.

***Claim Objections***

7. Claims 1 and 24 are objected to because of the following informalities. Appropriate correction is required.
  - a) In claim 1: on line 6, the phrase thereof "the light source is assembly is" contains a grammatical error. Should the mentioned feature be changed to --the light source assembly is--; and
  - b) In claim 24: on line 8, "at least lone" should be changed to --at least one--.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claim 26 is rejected because the claim is drafted to depend upon itself.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson (Canada Patent No. 2,262,912, of record).

Richardson discloses a cordless microscope. The microscope with illuminating system as described in pages 2-6 and shown in figure 1 comprises a frame (114) for supporting a stage module (100) and a microscope tube (119) wherein the stage module is used to support a combination of Leds and circuit board and the microscope tube is used to support a microscope having an objective system (122) and an eyepiece system (125). The connection among the battery (118), Leds (101) and wires are made via the wiring as described in page 3, lines 15+. It is also noted that Richardson disclose the use of a switch (116) for turn ON/OFF the illumination and also the use of external source via the connection (117) as can be seen in page 3.

Regard to the removal of the illuminating system, in page 3, Richardson discloses that his stage module containing an illuminating system is able to be connected to the frame and to be interchanged with other stage modules containing other illumination means.

Regarding to the connections among the Leds, the power source and the switch, while Richardson does not clearly state about the connections; however, such connections among the mentioned elements are inherently disclosed in the arrangement of the light source system provided by Richardson. In particular, since the Leds (101) are mounted on the circuit board (103); therefore, there are connections for connecting the nodes of the Leds to the wires formed on the circuit board. Such connection defines a first connection for connecting the Leds to the circuit board and for guiding the electrical flow from a light source to the Leds. The circuit board is connected to a switch (116) and a power source in the form of a battery (117) and/or an AC wall adaptor (see page 4, lines 5-7); therefore, there must be have a connector formed on the circuit board for connecting the circuit board and the switch. Such connection defines a second connector.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5 and 24-26, as best as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of Loudermilk (U.S. Patent No. 5,504,836).

Richardson discloses a cordless microscope. The microscope with illuminating system as described in pages 2-6 and shown in figure 1 comprises a frame (114) for supporting a stage module (100) and a microscope tube (119) wherein the stage module is used to support a combination of Leds and circuit board and the microscope tube is used to support a microscope having an objective system (122) and an eyepiece system (125). The connection among the battery (118), Leds (101) and wires are made via the wiring as described in page 3, lines 15+. It is also noted that Richardson disclose the use of a switch (116) for turn ON/OFF the illumination and also the use of external source via the connection (117) as can be seen in page 3.

Regard to the removal of the illuminating system, in page 3, Richardson discloses that his stage module containing an illuminating system is able to be connected to the frame and to be interchanged with other stage modules containing other illumination means.

Regarding to the connections among the Leds, the power source and the switch, while Richardson does not clearly state about the connections; however, such connections among the mentioned elements are inherently disclosed in the arrangement of the light source system provided by Richardson. In particular,

since the Leds (101) are mounted on the circuit board (103); therefore, there are connections for connecting the nodes of the Leds to the wires formed on the circuit board. Such connection defines a first connection for connecting the Leds to the circuit board and for guiding the electrical flow from a light source to the Leds. The circuit board is connected to a switch (116) and a power source in the form of a battery (117) and/or an AC wall adaptor (see page 4, lines 5-7); therefore, there must be have a connector formed on the circuit board for connecting the circuit board and the switch. Such connection defines a second connector.

Regarding to the third connection between a battery recharger and the battery or power source as recited in claim 5 and in claim 24, it is noted that Richardson disclose the use of a connection for the purpose of receiving power from a solar cell array or from an AC wall adapter. See page 4, lines 5-7. While Richardson does not clearly state that the power from an AC wall adapter is used to recharge the battery; however, such a connection as provided by Richardson is able to provide a means for recharging the battery. If it is not inherent then the use of an illuminating system having connections to a recharging battery and an AC supply wherein the AC supplies current for recharging the battery is suggested to one skilled in the art as can be seen in the illumination system provided by Loudermilk. See column 5, lines 24-34 and fig. 2. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Richardson by using the power from an AC wall

adapter for recharging the battery as suggested by Loudermilk for the purpose of recharging the battery so that the power of the battery is able to use when an AC wall adapter is not available in later use.

14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of Vennard (U.S. Patent no. 4,157,007, of record).

The microscope having an illuminating system provided by Richardson as described above does not disclose that the number of LEDs is four. However, the use of an illuminating system having four LEDs is known to one skilled in the art as can be seen in the system provided by Vannard. In particular, Vennard discloses an illuminating system for use in a watch module. The illuminating system as described in columns 2-4 and shown in figures 1-2, for example, comprises a circular-shaped circuit board (10) having a plurality of electrical wires embedded therein for the purpose of transmitting current flow from a battery/power source, a set of four LEDs (28, 30, 34 and 36) mounted on the circuit board for projecting light upwardly from the circuit board. The formation of connectors for connecting the LEDs and the battery/power source and a switch for controlling the ON/OFF transmission of current from the battery to the LEDs are also disclosed by Vennard as can be seen in columns 3-4. Thus, it would have obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Richardson by using four LEDs as suggested by Vannard for the purpose of providing an illuminating pattern with more brightness to the object or the area supporting the object.

15. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson.

Richardson discloses a cordless microscope. The microscope with illuminating system as described in pages 2-6 and shown in figure 1 comprises a frame (114) for supporting a stage module (100) and a microscope tube (119) wherein the stage module is used to support a combination of Leds and circuit board and the microscope tube is used to support a microscope having an objective system (122) and an eyepiece system (125). The connection among the battery (118), Leds (101) and wires are made via the wiring as described in page 3, lines 15+. It is also noted that Richardson disclose the use of a switch (116) for turn ON/OFF the illumination and also the use of external source via the connection (117) as can be seen in page 3.

Regarding to the connections among the Leds and the power source, while Richardson does not clearly state about the connections; however, such connections among the mentioned elements are inherently disclosed in the arrangement of the light source system provided by Richardson. In particular, since the Leds (101) are mounted on the circuit board (103); therefore, there are connections for connecting the nodes of the Leds to the wires formed on the circuit board. Such connection defines a first connection for connecting the Leds to the circuit board and for guiding the electrical flow from a light source to the Leds. The circuit board is connected to a switch (116) and a power source in the form of a battery (117) and/or an AC wall adaptor (see page 4, lines 5-7);

therefore, there must be have a connector formed on the circuit board for connecting the circuit board and the switch. Such connection defines a second connector.

Regarding to the feature that the light source assembly is operable to provide over forty hours of continuous operation as recited, such a feature is readable from the arrangement of the light source assembly as provided by Richardson. The support for that conclusion is as follow. Richardson disclose the use of a connection between the circuit board and power source wherein the power source can be a battery (117) or an external source which power is supplied from a solar cell array or from an AC wall adapter. See page 4, lines 5-7. When the AC wall adapter is connected to the illuminating system of the microscope then the light source assembly is able to operate a continuous period of time until the lifetime of the Leds. While Richardson does not clearly state that the lifetime of the Leds is over forty hours; however, it is known to one skilled in the art and also is sold in the market a plurality of Leds whose lifetime is more than 40 hours. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Richardson by using Leds whose lifetime is more than 40 hours for the purpose of providing light for an observation which requires a long time for analyzing or observation.

16. Claims 6, 12-13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of the Japanese reference No. 11-216111.

Richardson discloses a cordless microscope. The microscope with illuminating system as described in pages 2-6 and shown in figure 1 comprises a frame (114) for supporting a stage module (100) and a microscope tube (119) wherein the stage module is used to support a combination of Leds and circuit board and the microscope tube is used to support a microscope having an objective system (122) and an eyepiece system (125). The connection among the battery (118), Leds (101) and wires are made via the wiring as described in page 3, lines 15+. It is also noted that Richardson disclose the use of a switch (116) for turn ON/OFF the illumination and also the use of external source via the connection (117) as can be seen in page 3.

Regard to the removal of the illuminating system, in page 3, Richardson discloses that his stage module containing an illuminating system is able to be connected to the frame and to be interchanged with other stage modules containing other illumination means.

Regarding to the connections among the Leds, the power source and the switch, while Richardson does not clearly state about the connections; however, such connections among the mentioned elements are inherently disclosed in the arrangement of the light source system provided by Richardson. In particular, since the Leds (101) are mounted on the circuit board (103); therefore, there are connections for connecting the nodes of the Leds to the wires formed on the circuit board. Such connection defines a first connection for connecting the Leds to the circuit board and for guiding the electrical flow from a light source to the

Leds. The circuit board is connected to a switch (116) and a power source in the form of a battery (117) and/or an AC wall adaptor (see page 4, lines 5-7); therefore, there must be have a connector formed on the circuit board for connecting the circuit board and the switch. Such connection defines a second connector.

Regarding to the feature that the light source assembly is operable to provide over forty hours of continuous operation as recited, such a feature is readable from the arrangement of the light source assembly as provided by Richardson. The support for that conclusion is as follow. Richardson disclose the use of a connection between the circuit board and power source wherein the power source can be a battery (117) or an external source which power is supplied from a solar cell array or from an AC wall adapter. See page 4, lines 5-7. When the AC wall adapter is connected to the illuminating system of the microscope then the light source assembly is able to operate a continuous period of time until the lifetime of the Leds. While Richardson does not clearly state that the lifetime of the Leds is over forty hours; however, it is known to one skilled in the art and also is sold in the market a plurality of Leds whose lifetime is more than 40 hours. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Richardson by using Leds whose lifetime is more than 40 hours for the purpose of providing light for an observation which requires a long time for analyzing or observation.

As such, the cordless microscope having an illuminating system as provided by Richardson meets all of the limitations recited in claims 6 and 12-13 except he does not clearly state that the Leds used in his illuminating system produces a highly-focused angle of illumination. However, such a feature is inherent from the Leds used in the illumination system provided by Richardson absent any specific limitations related to the structure of the Leds claimed in the present claims 6 and 12. Applicant should note that a light emitting diode is a light source which produces a high focus illumination in comparison with incandescent lamp. If it is not inherent then it would have been obvious to one skilled in the art at the time the invention was made to utilize low-powered highly focused Leds of recent generations of AlInGaP, AlGaAs, InGaN, ... for the Leds used in the illumination system of the microscope provided by Richardson. An example of use an InGaN Led in an illuminating system of an endoscope is provided in the system described in the Japanese No. '111. Thus, it would have been obvious to one skilled in the art at the time the invention was made to utilize low-powered highly focused Leds of recent generations of AlInGaP, AlGaAs, InGaN, ... for the Leds as the use of an InGaN Led suggested by the Japanese reference '111 in the illuminating system of Richardson for the purpose of prolong the power of the battery and simultaneously providing a highly-focused illumination.

17. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of the Japanese reference No. 11-216111 as applied to claim 12 above, and further in view of Vennard.

The microscope having an illuminating system provided by Richardson and the Japanese reference No. '111 as described above does not disclose that the number of LEDs is four and the circuit board has a circular shape. However, the use of an illuminating system having four LEDs is known to one skilled in the art as can be seen in the system provided by Vennard. In particular, Vennard discloses an illuminating system for use in a watch module. The illuminating system as described in columns 2-4 and shown in figures 1-2, for example, comprises a circular-shaped circuit board (10) having a plurality of electrical wires embedded therein for the purpose of transmitting current flow from a battery/power source, a set of four LEDs (28, 30, 34 and 36) mounted on the circuit board for projecting light upwardly from the circuit board. The formation of connectors for connecting the LEDs and the battery/power source and a switch for controlling the ON/OFF transmission of current from the battery to the LEDs are also disclosed by Vennard as can be seen in columns 3-4. Thus, it would have obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Richardson by using four LEDs as suggested by Vennard for the purpose of providing an illuminating pattern with more brightness to the object or the area supporting the object.

18. Claims 7-8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of the Japanese reference No. 11-216111 as applied to claim 12 above, and further in view of Gurz et al (U.S. Patent No. 5,539,623, of record).

The combined product as provided by Richardson and the Japanese reference No. '111 meets all of the limitations recited in the claims except the feature that the feature related to a reflective coating formed on the circuit board. However, the use of a reflective coating on a circuit board supporting a plurality of LEDs is known to one skilled in the art as can be seen in the illuminating system provided by Gurz et al. In particular, Gurz et al disclose an illuminating system for an exit sign. The illuminating system as described in columns 4-7, claims 13-14 and shown in figures 2 and 7-8, for example, comprises a circuit board (70) for supporting a plurality of LEDs (65) wherein a reflective coating is coated for the purpose of increasing the reflection (column 5, lines 34+). Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Richardson and the Japanese reference No. '111 by utilizing a reflective coating on the circuit board as suggested by Gurz et al for the purpose of increasing the reflectant process.

19. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson, the Japanese reference No. 11-21611 and Gurz et al as applied to claim 7 above, and further in view of Vennard.

The microscope having an illuminating system provided by Richardson, the Japanese reference No. '111 and Gurz et al as described above does not disclose that the number of LEDs is four and the circuit board has a circular shape. However, the use of an illuminating system having four LEDs is known to one skilled in the art as can be seen in the system provided by Vennard. In

particular, Vennard discloses an illuminating system for use in a watch module. The illuminating system as described in columns 2-4 and shown in figures 1-2, for example, comprises a circular-shaped circuit board (10) having a plurality of electrical wires embedded therein for the purpose of transmitting current flow from a battery/power source, a set of four LEDs (28, 30, 34 and 36) mounted on the circuit board for projecting light upwardly from the circuit board. The formation of connectors for connecting the LEDs and the battery/power source and a switch for controlling the ON/OFF transmission of current from the battery to the LEDs are also disclosed by Vennard as can be seen in columns 3-4. Thus, it would have obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Richardson, the Japanese reference '111 and Gurz et al by using four LEDs as suggested by Vennard for the purpose of providing an illuminating pattern with more brightness to the object or the area supporting the object.

20. Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of the Japanese reference No. 11-216 111 and Gurz et al as applied to claims 7 and 12 above, and further in view of Loudermilk.

The combined product as provided by Richardson, the Japanese reference No. '111 and Gurz et al does not clearly state the third connector for connection between a battery recharger and the battery or power source as recited. However, it is noted that Richardson disclose the use of a connection for the purpose of receiving power from a solar cell array or from an AC wall adapter.

See page 4, lines 5-7. While Richardson does not clearly state that the power from an AC wall adapter is used to recharge the battery; however, such a connection as provided by Richardson is able to provide a means for recharging the battery. If it is not inherent then the use of an illuminating system having connections to a recharging battery and an AC supply wherein the AC supplies current for recharging the battery is suggested to one skilled in the art as can be seen in the illumination system provided by Loudermilk. See column 5, lines 24-34 and fig. 2. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Richardson by using the power from an AC wall adapter for recharging the battery as suggested by Loudermilk for the purpose of recharging the battery so that the power of the battery is able to use when an AC wall adapter is not available in later use.

#### ***Double Patenting***

21. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

22. Claims 1-6, 12-13, 15, 17 and 24-29, as best as understood, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 12-15 of U.S. Patent No. 6,714,348. Although the conflicting claims are not identical, they are not patentably distinct from each other because the device as claimed in claims 12-15 discloses a cordless microscope having a stage for supporting a specimen, a light source assembly for illuminating the specimen which light source assembly comprises the following features: A circuit board, a four Leds mounted on the circuit board wherein the Leds produce highly-focused angle of illumination and three connections for connecting the Leds, the power source and the battery recharger.

**Note: It is noted that the claim 12 shown in the Patent does not contain all of the features of the claim as indicated in the Notice of allowance due to printing error made by the Office. A certificate of correction is now made to correct the content of the claim 12 of the Patent 6,714,348. The claims of the present application are rejected on the corrected version of the claims to be allowed in the parent application.**

23. Claims 7-8, 10-11 and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 12-15 of U.S. Patent No. 6,714,348 in view of Gurz et al.

The device as disclosed in the patent claims 12-15 does not disclose that the circuit board has a reflective coating thereon. However, the use of a reflective coating on a circuit board supporting a plurality of LEDs is known to one skilled in the art as can be seen in the illuminating system provided by Gurz et al. In

particular, Gurz et al disclose an illuminating system for an exit sign. The illuminating system as described in columns 4-7, claims 13-14 and shown in figures 2 and 7-8, for example, comprises a circuit board (70) for supporting a plurality of LEDs (65) wherein a reflective coating is coated for the purpose of increasing the reflection (column 5, lines 34+). Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by claims 12-15 of the Patent No. '348 by utilizing a reflective coating on the circuit board as suggested by Gurz et al for the purpose of increasing the reflectant process.

24. Claims 9 and 14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 12-15 of U.S. Patent No. 6,714,348 in view of Vennard.

The device as disclosed in the patent claims 12-15 does not disclose that the circuit board has a circular shape. However, the use of an illuminating system having four LEDs mounted on a circular-shaped circuit board is known to one skilled in the art as can be seen in the system provided by Vennard. In particular, Vennard discloses an illuminating system for use in a watch module. The illuminating system as described in columns 2-4 and shown in figures 1-2, for example, comprises a circular-shaped circuit board (10) having a plurality of electrical wires embedded therein for the purpose of transmitting current flow from a battery/power source, a set of four LEDs (28, 30, 34 and 36) mounted on the circuit board for projecting light upwardly from the circuit board. The formation

of connectors for connecting the LEDs and the battery/power source and a switch for controlling the ON/OFF transmission of current from the battery to the LEDs are also disclosed by Vennard as can be seen in columns 3-4. Thus, it would have obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by the claims 12-15 of the Patent '348 by mounting the four LEDs on a circular-shaped circuit board as suggested by Vennard for the purpose of providing an illuminating pattern with more brightness to the object or the area supporting the object.

***Response to Arguments***

25. Applicant's arguments filed on 11/24/2003 have been fully considered but they are not persuasive.

A) Regarding to the rejection of the device as claimed in present claims 1-2 and 4 which are similar to the device as claimed in claims 13-14 and 16 of the parent application, applicant has argued that the device provided by Richardson does not disclose the removal of the light source assembly. It is the applicant's opinion that the whole stage module in the device of Richardson is removed during a process of changing the illumination pattern. The Examiner respectfully disagrees with the applicant's viewpoint and respectfully invited the applicant to review the device claimed in the present claims with the art of Richardson.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without

specifically pointing out how the language of the claims patentably distinguishes them from the references.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., only light source assembly is removable) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

B) Regarding to other rejections made in the parent application, applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

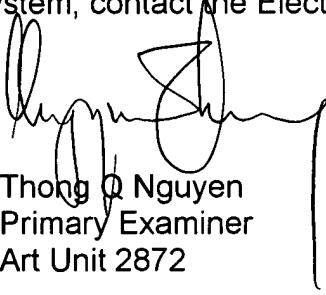
#### ***Conclusion***

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Nguyen  
Primary Examiner  
Art Unit 2872

\*\*\*